# 世界知的所有権機関国 際 事 務 周

# 特許協力条約に基づいて公開された国際出願



(51) 国際特許分類6

C07D 241/08, A61K 31/495, C07D 401/12, 401/14, 403/12, 403/10, 405/12, 405/14, 409/10, 409/12

(11) 国際公開番号

WO99/40075

(43) 国際公開日

1999年8月12日(12.08.99)

(21) 国際出願番号

PCT/JP99/00470

A1

(22) 国際出願日

1999年2月4日(04.02.99)

(30) 優先権データ

特願平10/24833 特願平10/317205 1998年2月5日(05.02.98)

1998年11月9日(09.11.98)

(71) 出願人(米国を除くすべての指定国について) 武田薬品工業株式会社 (TAKEDA CHEMICAL INDUSTRIES, LTD.)[IP/IP]

T541-0045 大阪府大阪市中央区道修町四丁目1番1号 Osaka, (JP)

(72) 発明者;および

(75) 発明者/出願人 (米国についてのみ)

多和田紘之(TAWADA, Hiroyuki)[JP/JP]

〒569-1032 大阪府高槻市宮之川原1丁目11番1号 Osaka, (JP)

伊藤文雄(ITOH, Fumio)[JP/JP]

〒560-0882 大阪府豊中市南桜塚4丁目13番24-402号

Osaka, (JP)

坂野 港(BANNO Hiroshi)[JP/JP]

〒563-9024 大阪府池田市五月丘5丁目1番3号 Osaka, (JP)

寺下善一(TERASHITA, Zen-ichi)[JP/JI<sup>2</sup>]

〒565-0085 大阪府豊中市上新田4丁目16番1-604号 Osaka, (JP) (74) 代理人

弁理士 朝日奈忠夫, 外(ASAHINA, Tadao et al.)

〒532-0024 大阪府大阪市淀川区十三本町2丁目17番85号

武田薬品工業株式会社 大阪工場内 Osaka, (JP)

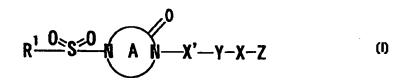
(81) 指定国 AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, 欧州特許 (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI特許 (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG), ARIPO特許 (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), ユーラシア特許 (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM)

添付公開書類

国際調査報告書

(54)Title: SULFONAMIDE DERIVATIVES, PROCESS FOR PRODUCING THE SAME AND UTILIZATION THEREOF

(54)発明の名称 スルホンアミド誘導体、その製造法及び用途



(57) Abstract

Compounds represented by general formula (I) or salts thereof and prodrugs of the same which have an inhibitory effect on activated blood coagulation factor X and thus are useful as anticoagulating agents. In formula (I), R¹ represents a hydrocarbyl or heterocyclic group each optionally substituted; the ring A represents a divalent nitrogen-containing heterocycle group optionally further substituted; X' represents optionally substituted alkylene; Y represents an optionally substituted divalent cyclic group; X represents a bond or optionally substituted alkylene; and Z represents (1) optionally substituted arnino, (2) optionally substituted imidoyl, or (3) an optionally substituted nitrogen-containing heterocyclic group.

FILE COVERS 1967 - 9 Jan 2001 VOL 134 ISS 3 FILE LAST UPDATED: 8 Jan 2001 (20010108/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

Now you can extend your author, patent assignee, patent information, and title searches back to 1907. The records from 1907-1966 now have this searchable data in CAOLD. You now have electronic access to all of CA: 1907 to 1966 in CAOLD and 1967 to the present in CAPLUS on STN.

The CA Lexicon is now available in the Controlled Term (/CT) field. Enter HELP LEXICON for full details.

Attention, the CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

=> s 13

L48 L3

=> d 14 1- ibib abs hitstr

YOU HAVE REQUESTED DATA FROM 8 ANSWERS - CONTINUE? Y/(N):y

ANSWER 1 OF 8 CAPLUS COPYRIGHT 2001 ACS ACCESSION NUMBER:

DOCUMENT NUMBER:

1999:511143 CAPLUS

131:170361

TITLE:

Preparation of sulfonamides as inhibitors of

activated

blood coagulation factor X

INVENTOR (S):

Tawada, Hiroyuki; Itoh, Fumio; Banno, Hiroshi;

Terashita, Zenichi

PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 187 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.			KIND		DATE			APPLICATION NO.				э.	DATE				
WO 9940075			A1		19990812			WO 1999-JP470					19990204				
w:	AL,	AM,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CN,	CU,	CZ,	EE,	GD,	GE,	
	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LT,	LV,	
	MD;	MG,	MK,	MN,	ΜX,	NO,	NZ,	PL,	RO,	RU,	SG,	SI,	sĸ,	SL,	ТJ,	TM,	
	TR,	TT,	UA,	US,	UZ,	VN,	YU,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM	

RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG AU 1999-22988 19990204 AU 9922988 A1 19990823 20000725 JP 1999-27053 19990204 JP 2000204081 A2

EP 1054005 20001122 EP 1999-902829 19990204 A1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, FI

PRIORITY APPLN. INFO.: JP 1998-24833 19980205 JP 1998-317205 19981109 19990204

WO 1999-JP470 MARPAT 131:170361

OTHER SOURCE(S):

The title compds. I [ R1 represents a hydrocarbyl or heterocyclic group AΒ each optionally substituted; the ring A represents a divalent nitrogen-contg. heterocycle group optionally further substituted; X' represents optionally substituted alkylene; Y represents an optionally substituted divalent cyclic group; X represents a bond or optionally substituted alkylene; and Z represents optionally substituted amino, optionally substituted imidoyl, or an optionally substituted nitrogen-contg. heterocyclic group] are prepd. Formulations contg. a compd. of this invention are given. In a test for inhibiting activity of title compds. against activated blood coagulation factor X, 1-(4-amidinobenzyl)-4-(6-chloronaphthalene-2-sulfonyl)-2-piperazinone hydrochloride showed IC50 of 0.05 .mu.M.

229646-37-1P 239071-44-4P 239071-46-6P 239071-47-7P 239071-48-8P 239071-50-2P 239071-51-3P 239071-52-4P 239071-53-5P 239071-54-6P 239071-55-7P 239071-62-6P 239071-63-7P 239071-64-8P 239071-65-9P 239071-66-0P 239071-67-1P 239071-68-2P 239071-69-3P 239071-70-6P 239071-71-7P 239071-79-5P 239071-81-9P 239071-82-0P 239071-83-1P 239071-85-3P 239071-86-4P 239071-87-5P 239071-88-6P 239071-92-2P 239071-93-3P 239071-94-4P 239071-97-7P 239071-98-8P 239071-99-9P 239072-00-5P 239072-01-6P 239072-02-7P 239072-03-8P 239072-05-0P 239072-23-2P 239072-29-8P 239072-30-1P 239072-31-2P 239072-32-3P 239072-33-4P 239072-34-5P 239072-35-6P 239072-36-7P 239072-37-8P 239072-38-9P 239072-39-0P 239072-40-3P 239072-41-4P 239072-42-5P 239072-43-6P 239072-44-7P 239072-45-8P 239072-46-9P 239072-47-0P 239072-48-1P 239072-49-2P 239072-50-5P

239072-51-6P 239072-52-7P 239072-53-8P 239072-54-9P 239072-57-2P 239072-58-3P 239072-60-7P 239072-62-9P 239072-63-0P 239072-64-1P 239072-65-2P 239072-66-3P 239072-67-4P 239072-68-5P 239072-69-6P 239074-62-5P RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of sulfonamides as inhibitors of activated blood coagulation factor X) 229646-37-1 CAPLUS RN CN Piperazinone, 4-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[[1-(4-pyridinyl)-4piperidinyl]methyl] - (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
0 & N - CH_2 \\
N & O
\end{array}$$

$$\begin{array}{c|c}
0 & N - CH_2 \\
\hline
 & 0 \\
 & 0
\end{array}$$

#### ● HCl

RN 239071-46-6 CAPLUS
CN Piperazinone, 4-[[(1E)-2-(4-chlorophenyl)ethenyl]sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX

Double bond geometry as shown.

# HCl

RN 239071-47-7 CAPLUS

CN Piperazinone, 4-[(4-ethenylphenyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

# ● HCl

RN 239071-48-8 CAPLUS

CN Piperazinone, 4-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[[4-hydroxy-1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
0 & N & CH_2 \\
S & N & OH
\end{array}$$

# ● HCl

RN 239071-50-2 CAPLUS

CN Piperazinone,

4-[(4-ethenylphenyl)sulfonyl]-1-[[4-hydroxy-1-(4-pyridinyl)-

4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 239071-51-3 CAPLUS

CN Piperazinone,

4-[(4-ethenylphenyl)sulfonyl]-1-[[4-hydroxy-1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 239071-52-4 CAPLUS

CN Piperazinone,

4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-1-[[4-hydroxy-1-(4-pyridinyl)-4-piperidinyl]methyl]-(9CI) (CA INDEX NAME)

RN 239071-53-5 CAPLUS

CN Piperazinone, 1-[[4-(acetyloxy)-1-(4-pyridinyl)-4-piperidinyl]methyl]-4-[(6-chloro-2-naphthalenyl)sulfonyl]- (9CI) (CA INDEX NAME)

RN 239071-54-6 CAPLUS

CN Piperazinone, 1-[[4-(acetyloxy)-1-(4-pyridinyl)-4-piperidinyl]methyl]-4[(4-ethenylphenyl)sulfonyl]- (9CI) (CA INDEX NAME)

RN 239071-55-7 CAPLUS

CN Piperazinone, 1-[[4-(acetyloxy)-1-(4-pyridinyl)-4-piperidinyl]methyl]-4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]- (9CI) (CA INDEX NAME)

RN 239071-62-6 CAPLUS

CN 4-Piperidinecarboxylic acid, 4-[[4-[(6-chloro-2-naphthalenyl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-1-(4-pyridinyl)-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

/ ● HCl

RN 239071-63-7 CAPLUS

CN 4-Piperidinecarboxylic acid, 4-[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-1-(4-pyridinyl)-, methyl ester (9CI) (CA INDEX NAME)

RN 239071-64-8 CAPLUS

CN Piperazinone,

4-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[[4-(hydroxymethyl)-1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
0 & N - CH_2 \\
N & N - CH_2
\end{array}$$

$$\begin{array}{c|c}
N & N - CH_2
\end{array}$$

RN 239071-65-9 CAPLUS

CN 4-Piperidinecarboxylic acid, 4-[[4-[(6-chloro-2-naphthalenyl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-1-(4-pyridinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & &$$

RN 239071-66-0 CAPLUS

CN 4-Piperidinecarboxamide,

4-[[4-[(6-chloro-2-naphthalenyl)sulfonyl]-2-oxo-1piperazinyl]methyl]-N,N-dimethyl-1-(4-pyridinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & &$$

RN 239071-67-1 CAPLUS

CN 4-Piperidinecarboxamide,

4-[[4-[(6-chloro-2-naphthalenyl)sulfonyl]-2-oxo-1piperazinyl]methyl]-N-methyl-1-(4-pyridinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & O & N - CH_2 \\
 & S - N & O & C - NHMe \\
 & O & O & O \\
\end{array}$$

RN 239071-68-2 CAPLUS

CN 4-Piperidinecarboxamide,

4-[[4-[(6-chloro-2-naphthalenyl)sulfonyl]-2-oxo-1piperazinyl]methyl]-1-(4-pyridinyl)- (9CI) (CA INDEX NAME)

RN 239071-69-3 CAPLUS

CN Piperazinone, 4-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[[4-hydroxy-1-(1-oxido-4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
0 & N - CH_2 \\
N & OH
\end{array}$$

RN 239071-70-6 CAPLUS

CN 4-Piperidinecarboxylic acid, 4-[[4-[(6-chloro-2-naphthalenyl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-1-(1-oxido-4-pyridinyl)-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & &$$

RN 239071-71-7 CAPLUS

CN 1-Piperazineacetonitrile, 4-[(6-chloro-2-naphthalenyl)sulfonyl]-2-oxo-.alpha.-[1-(4-pyridinyl)-4-piperidinyl)- (9CI) (CA INDEX NAME)

RN 239071-79-5 CAPLUS

CN Piperazinone, 4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

# ● HCl

RN 239071-81-9 CAPLUS

CN Piperazinone,

4-[(5-chloro-2-benzofuranyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & O & N - CH_2 \\
\hline
 & O & O \\
\hline$$

# HCl

RN 239071-82-0 CAPLUS

CN Piperazinone, 4-[[5-(4-chlorophenyl)-2-thienyl]sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 239071-83-1 CAPLUS

CN Piperazinone, 4-[(5-ethenyl-2-thienyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

#### HC1

RN 239071-85-3 CAPLUS

CN Piperazinone, 4-[(6-chloro-3,4-dihydro-2-naphthalenyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 239071-86-4 CAPLUS

CN Piperazinone, 4-[(6-bromo-2-naphthalenyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
0 & N - CH_2 \\
\hline
S & N \\
0
\end{array}$$

### ● HCl

RN 239071-87-5 CAPLUS

CN Piperazinone,

4-[(6-fluoro-2-naphthalenyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

# HCl

RN 239071-88-6 CAPLUS

CN Piperazinone,

4-[(6-methyl-2-naphthalenyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
0 & N - CH_2 \\
N & O
\end{array}$$
Me

HCl

RN 239071-92-2 CAPLUS

CN Piperazinone, 4-[(7-bromo-2H-1-benzopyran-3-yl)sulfonyl]-1-[[4-hydroxy-1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 239071-93-3 CAPLUS

CN Piperazinone, 4-[(7-chloro-6-fluoro-2H-1-benzopyran-3-yl)sulfonyl]-1-[[4-hydroxy-1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 239071-94-4 CAPLUS

CN Piperazinone,

4-[(7-chloro-4-hydroxy-2-oxo-2H-1-benzopyran-3-yl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 239071-97-7 CAPLUS

CN Piperazinone, 4-[(7-chloro-2-oxo-2H-1-benzopyran-3-yl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 239071-98-8 CAPLUS

CN 1-Piperazinepropanoic acid, 4-[(6-chloro-2-naphthalenyl)sulfonyl]-2-oxo-beta.-[1-(4-pyridinyl)-4-piperidinyl]-, methyl ester (9CI) (CA INDEX NAME)

RN 239071-99-9 CAPLUS

CN Piperazinone, 4-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[[4-hydroxy-1-(4-pyrimidinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
0 & N - CH_2 \\
N & OH
\end{array}$$

RN 239072-00-5 CAPLUS

CN Piperazinone, 4-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[[1-(6-chloro-4-pyrimidinyl)-4-hydroxy-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
0 & N - CH_2 \\
\hline
0 & OH
\end{array}$$
C1

RN 239072-01-6 CAPLUS

CN Piperazinone, 4-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[[1-(2-chloro-4-pyrimidinyl)-4-hydroxy-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
0 & N & CH_2 \\
S & N & OH
\end{array}$$
C1

RN 239072-02-7 CAPLUS

CN Piperazinone, 4-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[[4-hydroxy-1-[6-[(phenylmethyl)amino]-4-pyrimidinyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
0 & N & N \\
N & N & N \\
NH-CH_2-Ph \\
O & OH
\end{array}$$

RN 239072-03-8 CAPLUS

CN Piperazinone, 4-[(4-ethenylphenyl)sulfonyl]-1-[[4-hydroxy-1-(4-pyrimidinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 239072-05-0 CAPLUS

CN Piperazinone, 4-[[4-(1H-imidazol-1-ylmethyl)phenyl]sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

●2 HCl

RN 239072-23-2 CAPLUS
CN Piperazinone,
4-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[2-[1-(4-pyridinyl)4-piperidinyl]ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
0 & N - CH_2 - CH_2
\end{array}$$

HCl

RN 239072-29-8 CAPLUS

CN Piperazinone,

4-[[4-(1-methylethenyl)phenyl]sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2 \\ Me-C \\ \hline \\ O \\ O \\ \end{array}$$

RN 239072-30-1 CAPLUS

CN Piperazinone,

4-[[4-(1-methylethenyl)phenyl]sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} CH_2 \\ \parallel \\ Me-C \\ \hline \\ O \\ O \\ \end{array}$$

● HCl

RN 239072-31-2 CAPLUS

CN Piperazinone,

4-[[4-(1E)-1-propenylphenyl]sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 239072-32-3 CAPLUS

CN Piperazinone,

4-[[4-(1E)-1-propenylphenyl]sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Double bond geometry as shown.

#### HCl

RN 239072-33-4 CAPLUS

CN Piperazinone, 4-[(4-iodophenyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} I & O & N - CH_2 \\ \hline & S - N & O \\ \hline & O & \end{array}$$

RN 239072-34-5 CAPLUS

CN Piperazinone, 4-[(4-iodophenyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
I & O & N - CH_2 \\
S & N & O \\
O & O
\end{array}$$

#### HCl

RN 239072-35-6 CAPLUS

CN Piperazinone, 4-[(3-bromophenyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 239072-36-7 CAPLUS

CN Piperazinone, 4-[(3-bromophenyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

#### ● HCl

RN 239072-37-8 CAPLUS

CN Piperazinone,

4-[(2-oxo-2H-1-benzopyran-6-yl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 239072-38-9 CAPLUS

CN Piperazinone,

4-[(2-oxo-2H-1-benzopyran-6-yl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & \\ N & & \\ \end{array}$$

#### HCl

RN 239072-39-0 CAPLUS

CN Piperazinone, 4-[(7-chloro-4-oxo-4H-1-benzopyran-3-yl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 239072-40-3 CAPLUS

CN Piperazinone, 4-[(7-chloro-4-oxo-4H-1-benzopyran-3-yl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 239072-41-4 CAPLUS

CN Piperazinone, 4-([1,1'-biphenyl]-4-ylsulfonyl)-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 239072-42-5 CAPLUS

CN Piperazinone, 4-([1,1'-biphenyl]-4-ylsulfonyl)-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Ph & O & N-CH_2 \\ \hline \\ S & N & O \\ \hline \\ O & \end{array}$$

HCl

RN 239072-43-6 CAPLUS

CN Piperazinone, 4-([1,1'-biphenyl]-3-ylsulfonyl)-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

#### ● HCl

RN 239072-44-7 CAPLUS

CN Piperazinone, 4-[(3'-chloro[1,1'-biphenyl]-3-yl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

#### ● HCl

RN 239072-45-8 CAPLUS

CN Piperazinone, 4-[(4-ethynylphenyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 239072-46-9 CAPLUS

CN Piperazinone, 4-[(4-ethynylphenyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

#### HC1

RN 239072-47-0 CAPLUS

CN Piperazinone, 4-[(3-ethynylphenyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & O & N - CH_2 \\
 & S - N & O \\
 & O & O \\
 & O & O \\
 & O & O & O
\end{array}$$

RN 239072-48-1 CAPLUS

CN Piperazinone, 4-[(3-ethynylphenyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

#### ● HCl

RN 239072-49-2 CAPLUS

CN Piperazinone, 4-[[4-[(1E)-2-chloroethenyl]phenyl]sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 239072-50-5 CAPLUS

CN Piperazinone, 4-[[4-[(1E)-2-chloroethenyl]phenyl]sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Double bond geometry as shown.

# HCl

RN 239072-51-6 CAPLUS

CN Piperazinone, 4-[(4-ethylphenyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 239072-52-7 CAPLUS

CN Piperazinone, 4-[(4-ethylphenyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

#### HCl

RN 239072-53-8 CAPLUS

CN Piperazinone, 4-[(3-ethenylphenyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

$$H_2C = CH$$

O

N

 $CH_2$ 

N

O

N

 $CH_2$ 

O

O

N

 $CH_2$ 

N

O

N

 $CH_2$ 

O

N

RN 239072-54-9 CAPLUS

CN Piperazinone, 4-[(3-ethenylphenyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

# ● HCl

RN 239072-57-2 CAPLUS

CN Piperazinone, 4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-1-[[4-(1-oxopropoxy)-1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 239072-58-3 CAPLUS

CN Piperazinone, 4-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[[4-methoxy-1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 239072-60-7 CAPLUS

CN Methanesulfonamide, N-[4-[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-1-(4-pyridinyl)-4-piperidinyl]- (9CI) (CA INDEX

NAME)

RN 239072-62-9 CAPLUS

CN Glycine, N-[[4-[[4-[(6-chloro-2-naphthalenyl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-1-(4-pyridinyl)-4-piperidinyl]carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 239072-63-0 CAPLUS

CN Glycine, N-[[4-[[4-[(6-chloro-2-naphthalenyl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-1-(4-pyridinyl)-4-piperidinyl]carbonyl]-, ethyl ester,

monohydrochloride (9CI) (CA INDEX NAME)

#### HCl

RN 239072-64-1 CAPLUS

CN .beta.-Alanine, N-[[4-[[4-[(6-chloro-2-naphthalenyl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-1-(4-pyridinyl)-4-piperidinyl]carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 239072-65-2 CAPLUS

CN Butanoic acid, 4-[[[4-[[4-[(6-chloro-2-naphthalenyl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-1-(4-pyridinyl)-4-piperidinyl]carbonyl]amino]-, ethylester (9CI) (CA INDEX NAME)

RN 239072-66-3 CAPLUS

CN Glycine, N-[[4-[[4-[(6-chloro-2-naphthalenyl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-1-(4-pyridinyl)-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

RN 239072-67-4 CAPLUS

CN .beta.-Alanine, N-[[4-[[4-[(6-chloro-2-naphthalenyl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-1-(4-pyridinyl)-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

RN 239072-68-5 CAPLUS

CN Butanoic acid, 4-[[[4-[[4-[(6-chloro-2-naphthalenyl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-1-(4-pyridinyl)-4-piperidinyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 239072-69-6 CAPLUS

CN Carbamic acid, [4-[[4-[(6-chloro-2-naphthalenyl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-1-(4-pyridinyl)-4-piperidinyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 239074-62-5 CAPLUS

CN Piperazinone, 4-[(6-chloro-2-naphthalenyl)sulfonyl]-1-[[4-hydroxy-1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

IT 229646-35-9P 239073-05-3P 239073-27-9P

239073-28-0P 239073-46-2P 239073-50-8P

239073-69-9P 239074-19-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of sulfonamides as inhibitors of activated blood coagulation factor X)

RN 229646-35-9 CAPLUS

CN Piperazinone, 4-[(1E)-2-(4-chlorophenyl)ethenyl]sulfonyl]-1-[(1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 239073-05-3 CAPLUS

CN Piperazinone, 4-[(4-ethenylphenyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 239073-27-9 CAPLUS

CN 4-Piperidinecarboxylic acid, 4-[[4-[(6-chloro-2-naphthalenyl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-1-(4-pyridinyl)-, methyl ester (9CI) (CA INDEX NAME)

RN 239073-28-0 CAPLUS

CN 4-Piperidinecarboxylic acid, 4-[[4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-2-oxo-1-piperazinyl]methyl]-1-(4-pyridinyl)-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 239073-46-2 CAPLUS

CN Piperazinone, 4-[(7-chloro-2H-1-benzopyran-3-yl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 239073-50-8 CAPLUS

CN Piperazinone,

4-[(5-chloro-2-benzofuranyl)sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 239073-69-9 CAPLUS

CN Piperazinone, 4-[[4-(1H-imidazol-1-ylmethyl)phenyl]sulfonyl]-1-[[1-(4-pyridinyl)-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A